AMENDMENTS TO THE SPECIFICATION

Please amend the Specification as follows:

Please amend paragraph [0018] as follows:

[0018] The function of the electroosmotic pump device 10 will now be described. ~~Electrolyte containing solution is introduced into the reservoirs 12, 14, 16 and channels 18, 20, 22 by capillary action or other means. Electrical contact with the electrolyte is achieved through the electrode 26, 28, 30. The white area shown in channel 22 and reservoir 16 represents a region of suppressed electroosmotic flow. Upon establishing a voltage drop between electrode 28 and electrode 30, electroosmotic flow occurs from reservoir 14 to reservoir 16, or vice versa depending on field polarity. Due to suppressed electroosmotic flow in channel 22 relative to channel 20, the unsuppressed electroosmotic flow in channel 20 creates a negative pressure in channel 18 as demanded by the equation of continuity. In turn, the pressure results in the convective pumping of electrolyte in channel 18 from reservoir 12 toward reservoir 16.~~ The operation of this pump relies upon two known properties of electroosmotically-induced liquid flow, namely: first, electroosmotic flow follows the path of electrical current within a liquid; second, the force of electroosmotic flow varies as a function of the zeta potential of the walls of the container in which flow is caused to occur. The device 10 utilizes these two known properties to induce hydrostatic flow as follows. The device consists of the three channels 18, 20, and 22, which share a common intersection 24. The zeta potential of the wall of channel 22 is reduced. By reducing the zeta potential of the wall of channel 22, the force of electroosmotic flow in channel 22 is thereby reduced in comparison to the channels 18 and 20. By establishing electric current between reservoir 14 and reservoir 16 via electrodes 28 and 30, electroosmotic flow is induced in channels 20 and 22. However, the force of

electroosmotic flow in channel 20 is greater than the force of electroosmotic flow in channel 22. This, in turn, creates positive hydrostatic pressure at the intersection 24, because it is at this intersection that there occurs a transition from high to low electroosmotic force. The hydrostatic pressure at the intersection is relieved by movement of liquid in channel 18 towards reservoir 12. The net effect is to induce a pressure-driven flow in channel 18 by electroosmosis in channels 20 and 22.